

# East AFRITAC

***East Africa Regional Technical Assistance Center***

**UPLOADING EXCEL WORKBOOK INTO THE PRICE INDEXES  
PROCESSOR:**

***Field Manual #3***



**EastAFRITAC**  
INTERNATIONAL MONETARY FUND  
REGIONAL TECHNICAL  
ASSISTANCE CENTER



*Compiled by:*

*Mr. Iddi H. Makame*

## **Selected Acronyms**

<i>Ccode</i>	<i>Country Code found in the SPD table</i>
<i>COICOP</i>	<i>Classification of Individual Consumption by Purpose</i>
<i>CNote</i>	<i>Product note explaining the product found in the SPD table</i>
<i>Ctitle</i>	<i>Title of product based on COICOP found in the SPD table</i>
<i>Digit</i>	<i>Level of COICOP detail</i>
<i>ID</i>	<i>Product Identification found in the SPD table</i>
<i>IsActive</i>	<i>The Variety is Active found in the SPD table</i>
<i>HBS</i>	<i>Household Budget Survey</i>
<i>Ocode</i>	<i>OECD Product Code found in the SPD table</i>
<i>Otitle</i>	<i>OECD Classification Title found in the SPD table</i>
<i>Onote</i>	<i>OECD Product note explaining the product</i>
<i>PIPS</i>	<i>Price Index Processor Software</i>
<i>PPS</i>	<i>Point of Purchase Survey</i>
<i>SN</i>	<i>Serial Number assigned to each product and variety</i>
<i>SPD</i>	<i>Structured Product Description</i>
<i>Stitle</i>	<i>SPD title for products</i>
<i>tblCPSPD</i>	<i>Microsoft Access table used to customize country's products</i>
<i>tblCountryVCode</i>	<i>A Dictionary used to create and define local products</i>

<i>VParent</i>	<i>Product defined in Microsoft Access table</i>
<i>VCode</i>	<i>Variety Code defined in Microsoft Access table</i>
<i>VDesc</i>	<i>Variety Description defined in Microsoft Access table</i>

## **FOREWORD**

*This manual is the outcome of a joint effort by the Office of the Chief Government Statistician (OCGS), Zanzibar, and East AFRITAC to produce a user's manual for compiling the Consumer Price Index (CPI). The fundamental features and contents presented in this manual aim at strengthening the compilation of the CPI by using a system, known as the Price Index Processing Software (PIPS).*

*This compilation software is essential for producing CPI estimates. Experience shows that every country within the region has its own CPI compilation program and mainly uses Microsoft Excel. Using the PIPS is an operational step for the CPI harmonization in the region.*

*The Office of the Chief Government Statistician has worked closely with East AFRITAC to develop a simple user's manual for uploading Excel workbooks into the PIPS. The purpose of this manual is to help East African countries that intend to use the PIPS for compiling their CPI. Thus, I am pleased to introduce this Field Manual, prepared with assistance from the East AFRITAC Statistics Advisor, Dr. Shelley Winston.*

*Indeed, the success of this publication stems from a concerted effort and cooperation among staff members from the Price Statistics Unit under the Economic Statistics Section of the OCGS, who piloted the PIPS for about three years.*

*I would like to extend special thanks to the East AFRITAC Statistics Advisor for her encouraging role and great contribution to this endeavour with technical support, advice and encouragement.*

*Mohammed Hafidh Rajab*

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## **PREAMBLE BY THE EAST AFRITAC COORDINATOR**

*After years of testing the IMF-developed Price Index Processor Software (PIPS), the Zanzibar Office of the Chief Government Statistician (OCGS) decided to take the decisive step in 2010 to set up and use the PIPS for calculating the CPI. To pass on the knowledge it has gained in this process, the OCGS, with guidance from East AFRITAC, decided to document its experience by publishing this East AFRITAC field manual, with a view to helping other CPI compilers in the East Africa region and elsewhere.*

*This field manual, "Uploading Excel Workbooks into the Price Index Processor," aims to assist compilers who have already saved and formatted their data in Excel for their CPI calculation and who would like to import their data into the more robust PIPS. The PIPS is an application developed software, which simplifies sound CPI estimation, analysis, and report generation. The PIPS also follows international best practices for calculating CPIs. For example, the PIPS classifies the index according to the Classification of Individual Consumption by Purpose (COICOP). It promotes regional, items, and outlets price index calculations. More importantly, the PIPS estimates the indexes according to the Jevons (geometric mean) formula for the lower and higher lever indices.*

*I hope that the PIPS will contribute to promoting international and regional consistency and harmonization in CPI methods, estimations, and calculations. Even for those statistical offices that do not use the PIPS, this software will at least provide the templates and guidelines for producing and calculating accurate, credible, reliable, and transparent CPIs.*

*I would like to thank the following for drafting this Manual. Mr. Iddi Makame, from the Zanzibar Office of the Chief Government Statistician, who was the main author; Ms. Shelley Winston, East AFRITAC Statistics Advisor, for overseeing and providing technical advice and for ensuring quality. I also would like to thank the region's statistics offices and the IMF Statistics Department for their valuable comments.*

*Mario de Zamaróczy*

*East AFRITAC Coordinator*

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## **Introduction**

*This Field Manual Uploading Excel Workbooks into the Price Index Processor tries to address the needs and to provide assistance to countries that have tried or will try to use the Consumer Price Index Price (CPI) Processor Software (PIPS). Therefore, this manual aims to provide easy to follow instructions for uploading already created Excel workbooks and databases that are formatted with expenditure shares, CPI outlets, products, varieties, and price information for uploading into the PIPS compilation system.*

*This manual, hence, is to be used purely as a guide to accompany the Consumer Price Index Compilation System User Guide, (Price Index Processor Version II: Consumer Price Index, Revised Version, August 2009), which provides in-depth details, definitions, and explanations. Additionally, this manual assumes that CPI compilers are already familiar with the PIPS system.*

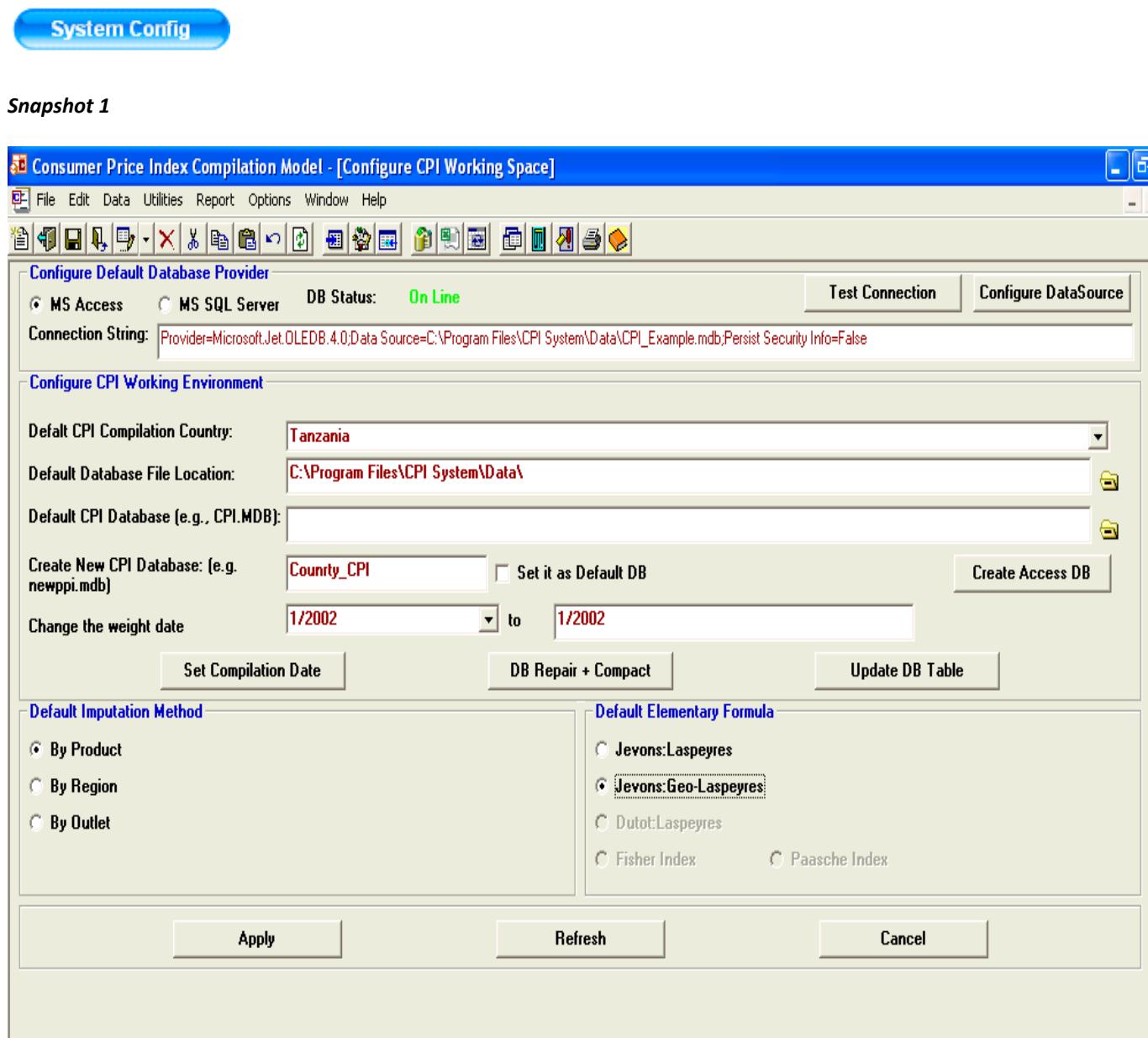
*This Field Manual was drafted with screen shots or “Snapshots” taken directly from the PIPS to facilitate ease of understanding. There are three sections with sub-headings that proceed in a logical manner. Section I starts by demonstrating how to create a new CPI database, how to enter the areas covered, how to add outlet information, and how to enter weights. Section II describes how to append the worksheets created in Section I, how to enter products and varieties for each outlet, and how to enter price information. Section III concludes with reviewing item weight distribution and how to check for data consistency.*

*The Price Index Processor Software is developed by the International Monetary Fund and has authorized the United Nations Economic Commission for Europe (UNECE) Statistics Division, with whom the IMF has no other affiliation, to distribute the software. The IMF retains ownership rights to the original software. The IMF, the UNECE Statistics Division, and the East Africa Regional Technical Assistance Center assumes no responsibility to users for support or maintenance and has disclaimed all liability for any errors that may exist in the software and for any other claims relating to the software. The PIPS was developed using standard Microsoft tools available to all users and only requires that users have licensed versions of Microsoft Office Suite.*

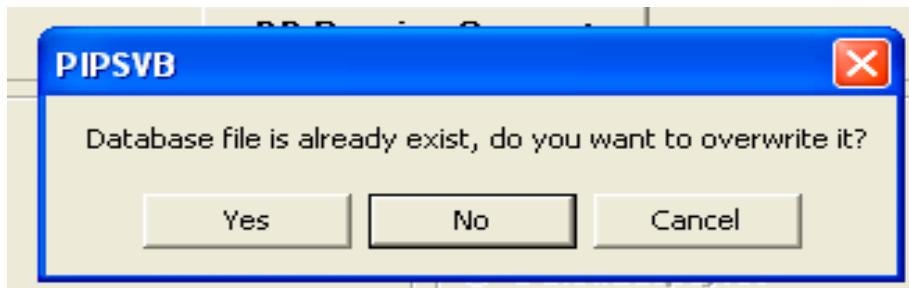
## I. UPLOADING EXCEL WORKBOOK INTO THE PRICE INDEX PROCESSOR

### 1.1 Create New CPI Database

1. Open the PIPS Compiler. On the main window, click **System Configuration**.



2. Write the name of the new CPI Database in **Create New CPI Database** field, change the weight dates. The default imputation method can be set now or at any time when needed. The elementary formulae can also be set at this time or later. When finished, click **Create Access DB** to create the database. Then, click **Cancel** to return to the main window.



3. If this message appears, it means that that database being created already exists, in that case, click **Cancel**. Click the **Set is as Default DB** box in order for the system to always open the working database. Click cancel to return to the main page.

## 1.2 Area Description

4. From the main window, click **Add New** and then **Add/Edit Area**.

**Add New**

### Snapshot 2

The screenshot shows the 'Consumer Price Index Compilation Model - [Outlet:1]' application. The main window title is 'Consumer Price Index Compilation Model - [Outlet:1]'. The menu bar includes File, Edit, Utilities, Report, Options, Window, and Help. The toolbar has various icons for file operations. The main panel is titled 'Create Outlet' and contains the following fields:

- Outlet ID\*: [Text input field]
- Outlet Name\*: [Text input field]
- Area Name (Weights)\*: [Dropdown menu set to 'Urban']
- Area Description: [Text input field]
- Area Name (Compilable): [Text input field]

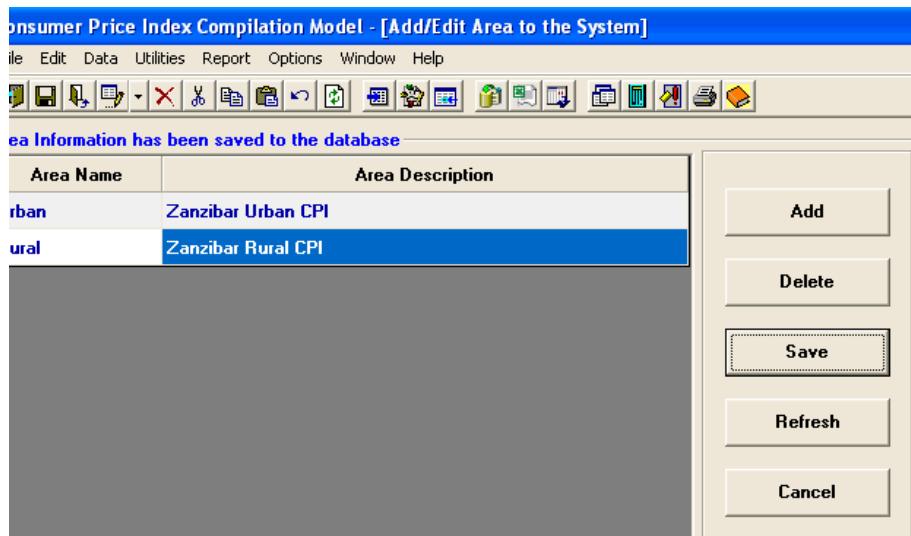
To the right of the form, there are three buttons:

- Outlet ID Coding
- Batch Edit/Upload
- Add/Edit Area

A note at the bottom right of the right panel states: "\* are required fields".

5. Define the **Area** that will be covered in the CPI. This information will determine how many regions or stratified indexes will be produced. For example, a country may cover and include urban, rural, lower income, middle income, upper income areas..

### **Snapshot 3**



Note, comparing the CPI for an area to another area index gives an indication of difference among the areas' rates of price change. Such comparisons indicate whether, over time, prices of similar items that consumers in one area tend to buy have risen more or less rapidly than the prices of items that consumers in another area tend to buy. These comparisons DO NOT indicate whether the average level of prices in an area is higher or lower

*than the average level of prices in another area.*

Click **Save** then **Cancel** to return to CPI Main Window.

### **1.3. Outlet Information**

6. Organize the CPI outlets information in a Microsoft Excel worksheet, as shown in Snapshot 4. This worksheet is formatted exactly as the PIPS processor format.

**Snapshot 4**

	A	B	C	D	E	F
1	Outlet ID*	Outlet Name*	Area *	Description	Area Compilable	Outlet Status
2	5311001	Hamadi Ali	Urban		Unguja	5
3	5311002	Mussa Khamis	Urban		Unguja	5
4	5311003	Mosi Ali	Urban		Unguja	5
5	5311004	Salum Juma Machano	Urban	1	Unguja	5
6	5311005	Abdi A. Vuai	Urban		Unguja	5
7	5311006	Mrisho Abdalla Ussi	Urban	1	Unguja	5
8	5311007	Vuai Issa Vuai	Urban		Unguja	5
9	5311008	Juma Mikate	Urban		Unguja	5
10	5311010	Amour Ali Vuai	Urban		Unguja	5
11	5311011	Ali Hilali M/kwerekwe	Urban	H	Unguja	5
12	5311012	Asha Fatuma Mwanakw	Urban		Unguja	5
13	5311013	Haji Ali	Urban		Unguja	5
14						

7. Once finished, on the PIPS main window click **Add New** then **Batch Edit/Upload** to upload the outlets information. An Excel spreadsheet, shown in Snapshot 5, will open. The information from the Excel spreadsheet created, Snapshot 4, can then be copied and pasted into the PIPS spreadsheet, Snapshot 5. Note, the columns include **Outlet ID**, **Outlet Name**, **Area**, **Description**, **Area Compatible**, and **Outlet Status**. Keep in mind that **Area** refers to urban, rural, etc., depending on how the expenditure weights were determined. **Area Compatible** refers to the name of the area provided in column D; For example, Unguja is the name of the urban area shown in Snapshot 4.

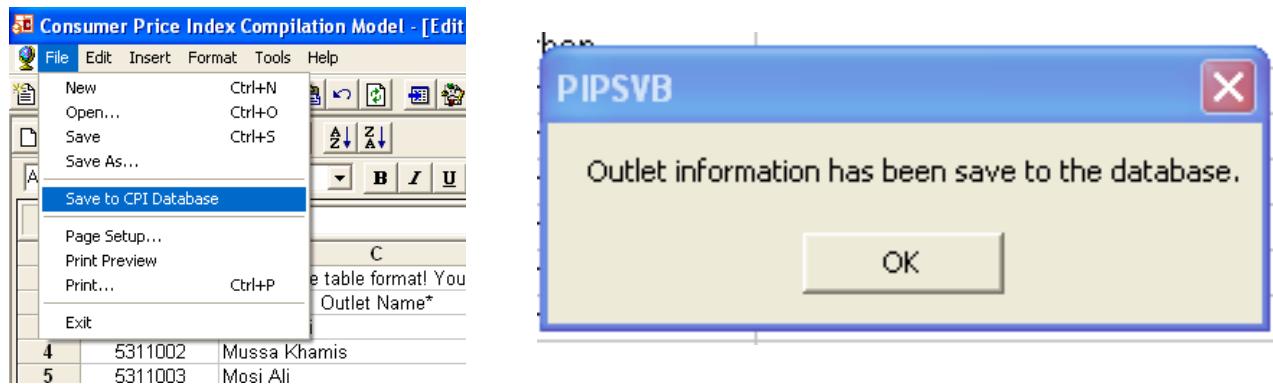
**Snapshot 5**

The screenshot shows a software application window titled "Consumer Price Index Compilation Model - [Edit Review Item Weights]". The menu bar includes File, Edit, Insert, Format, Tools, and Help. The toolbar contains various icons for file operations like New, Open, Save, Print, and Database. Below the toolbar is a smaller set of icons for document manipulation. The font and size are set to Arial 10pt. The main area displays a table with columns B through I. Row 1 contains a note: "\*\*\*Please do not change the table format! You can add rows at the end of the worksheet! Click 'Save to CPI Database' once you finished." Rows 2 through 11 have headers: B (Outlet ID\*), C (Outlet Name\*), D (Area \*), E (Description), F (Area Compilable), and G (Outlet Status). Row 3 has a blacked-out value in the B column.

Consumer Price Index Compilation Model - [Edit Review Item Weights]								
File Edit Insert Format Tools Help								
B	C	D	E	F	G	H	I	
1	***Please do not change the table format! You can add rows at the end of the worksheet! Click 'Save to CPI Database' once you finished.							
2	Outlet ID*	Outlet Name*	Area *	Description	Area Compilable	Outlet Status		
3								
4								
5								
6								
7								
8								
9								
10								
11								

8. To save the outlets information into the PIPS compiler, select **file menu** and then **save to CPI database** as shown in Snapshot 6.

**Snapshot 6**



9. After saving to **CPI Database**, on **file menu**, click **exit** to return to the PIPS Main Menu. A message will appear saying that the outlet information has been successfully saved.

To check that the outlet data have been uploaded correctly, click **Edit**, then the list of outlets will appear. If correct, click **Cancel**.

## 1.4 Entering Weight

10. In an Excel spreadsheet, organize the CPI weight information, if possible, at level 7 of the Classification of Individual Consumption by Purpose (COICOP) for which expenditure weights were determined. An example is shown in Snapshot 7. Note, **Total** is equal to **Rural** plus **Urban**.

**Snapshot 7**

	A	B	C	D	E	F	G
1	COICOP Code	Level	Description	Rural	Urban	Total	
2	11.01.11.1_01	7	RICE				
3	11.01.11.1_02	7	BOXED RICE DISHES				
4	11.01.11.2_01	7	FLOUR				
5	11.01.11.2_02	7	PREPARED FLOUR MIXES				
6	11.01.11.2_03	7	BREAKFAST CEREAL				
7	11.01.11.2_04	7	CORNMEAL				
8	11.01.11.2_05	7	WHEAT				
9	11.01.11.2_06	7	OTHER CEREAL SOLD AS GRAIN				
10	11.01.11.2_07	7	Cous Cous				
11	11.01.11.2_08	7	Other rice products				
12	11.01.11.2_09	7	Milling service				
13	11.01.11.3_01	7	WHITE BREAD				
14	11.01.11.3_02	7	BREAD OTHER THAN WHITE				
15	11.01.11.4_01	7	SPECIALTY BREADS				
16	11.01.11.4_02	7	SCONES/BISCUITS IN US				
17	11.01.11.4_03	7	MUFFINS				

11. Next, on the PIPS main window click **Item Weights** or, go to the **Utilities** menu then select **Item Weights Upload Template**. Before clicking **Generate**, make sure level 7 is selected. Snapshot 8 will open.

### **Snapshot 8**

Consumer Price Index Compilation Model - [Generate Spreadsheet Template for Weights Upload]

File Edit Data Utilities Report Options Window Help

OECD Product Coding System - at 7 detail level. Total 129 records

COICOP-ICP	COICOP	Level	Description
11.01.11.1_01		7	RICE
11.01.11.2_01		7	FLOUR
11.01.11.2_06		7	OTHER CEREAL SOLD AS GRAIN
11.01.11.4_02		7	SCONES/BISCUITS
11.01.11.4_16		7	BAKERY PRODUCT
11.01.11.5_01		7	PASTA
11.01.12.1_09		7	Beef non-specific cuts
11.01.12.3_05		7	LAMB, MUTTON AND GOAT
11.01.12.4_01		7	WHOLE CHICKEN
11.01.12.5_01		7	ORGAN MEATS
11.01.13.1_01		7	FISH
11.01.13.1_02	01.1.3.2	7	SEAFOOD
11.01.14.1_01		7	FRESH MILK
11.01.14.2_01		7	POWDER/EVAPORATED/CONDENSED MILK (NIDO)
11.01.14.4_01		7	EGGS IN SHELL
11.01.15.2_01		7	MARGARINE
11.01.15.3_02		7	COOKING AND OTHER EDIBLE OIL
11.01.16.1_01		7	CITRUS FRUITS
11.01.16.1_02	01.1.6.2	7	BANANAS
11.01.16.1_07	01.1.6.7	7	Tropical fruits
11.01.16.2_02		7	NUTS AND SEEDS
11.01.17.1_01		7	LEAF AND STEM VEGETABLES
11.01.17.1_02	01.1.7.2	7	Cabbages and cruciferous vegetables
11.01.17.1_03	01.1.7.3	7	FRUIT VEGETABLES
11.01.17.1_04		7	PULSES
11.01.17.1_05	01.1.7.4	7	ROOT CROPS, NON-STARCHY BULBS AND MUSHROOMS
11.01.17.2_01		7	POTATOES
11.01.18.1_01		7	White sugar
11.01.18.2_01		7	JELLY, JAM, PRESERVES, MARMALADE, FRUIT BUTTER
11.01.18.2_03		7	Honey
11.01.19.1_09		7	SALT
11.01.19.1_11	01.1.9.1	7	Spices and dried herbs
11.01.21.1_01		7	COFFEE
11.01.21.1_02	01.21.2	7	TEA
11.01.22.1_01		7	Mineral Waters

Select Level: 7  
 Display Mixed Level

Area Code  
 Urban  
 Rural  
 Total

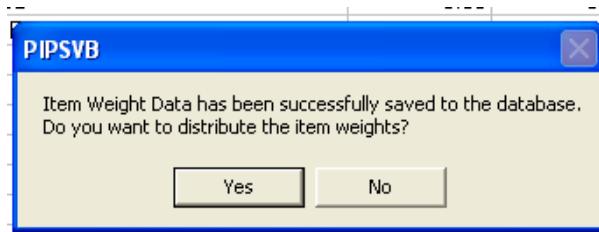
Generate Add Area  
 Refresh Cancel

12. Remember to select level 7, and then click the **Generate** to create an Excel spreadsheet. Snapshot 9 will appear. From this spreadsheet, delete all the information except for the column headers.

### **Snapshot 9**

Consumer Price Index Compilation Model - [Edit Review Item Weights]						
File Edit Insert Format Tools Help						
New Ctrl+N Open... Ctrl+O Save Ctrl+S Save As...		100%				
<b>Save to CPI Database</b>						
Page Setup...						
Print Preview						
Print... Ctrl+P						
Exit						
C	Description	D	E	F	G	H
RICE		Urban	Rural	Total		J
FLOUR						
4 11.01.11.2_06 7	OTHER CEREAL SOLD AS GRAIN					
5 11.01.11.4_02 7	SCONES/BISCUITS					
6 11.01.11.4_16 7	BAKERY PRODUCT					
7 11.01.11.5_01 7	PASTA					
8 11.01.12.1_09 7	Beef non-specific cuts					
9 11.01.12.3_05 7	LAMB, MUTTON AND GOAT					
10 11.01.12.4_01 7	WHOLE CHICKEN					
11 11.01.12.5_01 7	ORGAN MEATS					
12 11.01.13.1_01 7	FISH					
13 11.01.13.1_02 7	SEAFOOD					
14 11.01.14.1_01 7	FRESH MILK					
15 11.01.14.2_01 7	POWDER/EVAPORATED/CONDENSED MILK (NIDO)					
16 11.01.14.4_01 7	EGGS IN SHELL					
17 11.01.15.2_01 7	MARGARINE					
18 11.01.15.3_02 7	COOKING AND OTHER EDIBLE OIL					
19 11.01.16.1_01 7	CITRUS FRUITS					
20 11.01.16.1_02 7	BANANAS					
21 11.01.16.1_07 7	Tropical fruits					
22 11.01.16.2_02 7	NUTS AND SEEDS					
23 11.01.17.1_01 7	LEAF AND STEM VEGETABLES					
24 11.01.17.1_02 7	Cabbages and cruciferous vegetables					
25 11.01.17.1_03 7	FRUIT VEGETABLES					
26 11.01.17.1_04 7	PULSES					
27 11.01.17.1_05 7	ROOT CROPS, NON-STARCHY BULBS AND MUSHROOMS					
28 11.01.17.2_01 7	POTATOES					
29 11.01.18.1_01 7	White sugar					

13. From the Excel spreadsheet created (step 10) copy and paste the information into the Excel PIPS spreadsheet (step 12, Snapshot 9). Make sure all the information is entered in the correct columns.
14. When finished, under the file menu, click **Save to CPI database** as shown in Snapshot 9, then click **Exit**. To generate an Excel spreadsheet template for Weight upload click **Cancel** to return **PIPS Main Menu**.



15. At this time, products per outlets have not yet been assigned. Therefore, do not distribute the item weights when prompted in the PIPSVB Box; select **No**.

## II. JOINING WORKSHEETS

### 1.5 Appending worksheets

16. To calculate the price index, prices are usually entered for each product at the variety level. Therefore, an Excel spreadsheet should have been created that has variety/ies assigned to each product. Varieties are usually found at level 8 of the COICOP hierachal structure. For example, 11.01.11.1\_01 is the level 7 for rice, and 11.01.11.1\_01a, level 8 is one type of variety for rice (Snapshot 10).

**Snapshot 10**

	A	B	C	D	E	F
1	vParent	Level	Variety level	vCode	vDesc	IsActive
2	11.01.11.1_01	7			RICE	FALSE
3	11.01.11.1_01	8	a	11.01.11.1_01a	Imported Rice Basmati	TRUE
4	11.01.11.1_01	8	b	11.01.11.1_01b	Local Rice Pishori	TRUE
5	11.01.11.1_01	8	c	11.01.11.1_01c	Local Rice Kitumbo	TRUE
6	11.01.11.2_01	7			FLOUR	FALSE
7	11.01.11.2_01	8	a	11.01.11.2_01a	Maize Flour	TRUE
8	11.01.11.2_01	8	b	11.01.11.2_01b	Wheat Flour	TRUE
9	11.01.11.2_01	8	c	11.01.11.2_01c	Sorghum Flour	TRUE
10	11.01.11.2_06	7			OTHER CEREAL SOLD AS GRAIN	FALSE
11						
12						
13	11.01.11.4_02	7			SCONES/BISCUITS	FALSE
14						
15	11.01.11.4_16	7			BAKERY PRODUCT	FALSE
16	11.01.11.5_01	7			PASTA	FALSE
17	11.01.12.1_09	7			Beef non-specific cuts	
18	11.01.12.3_05	7			LAMB, MUTTON AND GOAT	
19	11.01.12.4_01	7			WHOLE CHICKEN	
20	11.01.12.5_01	7			ORGAN MEATS	
21	11.01.13.1_01	7			FISH	
22	11.01.13.1_02	7			SEAFOOD	FALSE
23	11.01.13.1_02	8	a	11.01.13.1_02a	King Fish	TRUE
24	11.01.13.1_02	8	b	11.01.13.1_02b	Tilapia	TRUE
25	11.01.13.1_02	8	c	11.01.13.1_02c		TRUE
26	11.01.14.1_01	7			FRESH MILK	

17. Create a spreadsheet in Excel (Snapshot 12) similar to the information shown in the Access table in Snapshot 11. The columns should be named: VCode (the variety code), VParent (the product), VDesc (the variety description), and IsActive (the variety is active).

**Snapshot 11**

The screenshot shows a Microsoft Access application window titled "tblCountryVCode : Table". The window has a menu bar with File, Edit, View, Insert, Format, Records, Tools, Window, Help, and Adobe PDF. Below the menu is a toolbar with various icons. The main area displays a table with four columns: vCode, vParent, vDesc, and IsActive. The table contains 21 rows of data, each with a checkmark in the IsActive column. The data includes various food items and their descriptions in English and Swahili.

	vCode	vParent	vDesc	IsActive
▶	11.01.11.1_01c	11.01.11.1_01	Thailand	<input checked="" type="checkbox"/>
	11.01.11.2_01a	11.01.11.2_01	Wheat flour (unga wa ngano)	<input checked="" type="checkbox"/>
	11.01.11.2_01b	11.01.11.2_01	Maize Flour azam (Unga wa ser)	<input checked="" type="checkbox"/>
	11.01.11.2_01c	11.01.11.2_01	Sorghum Flour (Unga wa Mtama)	<input checked="" type="checkbox"/>
	11.01.11.2_01d	11.01.11.2_01	Baby food Excluding milk ( Cereals)	<input checked="" type="checkbox"/>
	11.01.11.2_06a	11.01.11.2_06	Sorghum grain ( Mtama)	<input checked="" type="checkbox"/>
	11.01.11.4_02a	11.01.11.4_02	Biscuit Glucose	<input checked="" type="checkbox"/>
	11.01.11.4_16a	11.01.11.4_16	Bread (mkate wa boflo)	<input checked="" type="checkbox"/>
	11.01.11.5_01a	11.01.11.5_01	Spaghetti (Tambi)	<input checked="" type="checkbox"/>
	11.01.12.1_09a	11.01.12.1_09	Meat with Borns (Nyama na mfu)	<input checked="" type="checkbox"/>
	11.01.12.1_09b	11.01.12.1_09	Meat without Borns (Nyama safi)	<input checked="" type="checkbox"/>
	11.01.12.3_05a	11.01.12.3_05	Goat Meat	<input checked="" type="checkbox"/>
	11.01.12.4_01a	11.01.12.4_01	Chicken (kuku aliechinjwa)	<input checked="" type="checkbox"/>
	11.01.12.5_01a	11.01.12.5_01	Organ Meat (Utumbo)	<input checked="" type="checkbox"/>
	11.01.13.1_01a	11.01.13.1_01	King Fish (Nguru)	<input checked="" type="checkbox"/>
	11.01.13.1_01b	11.01.13.1_01	Tuna (Jodari)	<input checked="" type="checkbox"/>
	11.01.13.1_01c	11.01.13.1_01	Emperors (Changu)	<input checked="" type="checkbox"/>
	11.01.13.1_01d	11.01.13.1_01	Sword Fish (Nduwaro)	<input checked="" type="checkbox"/>

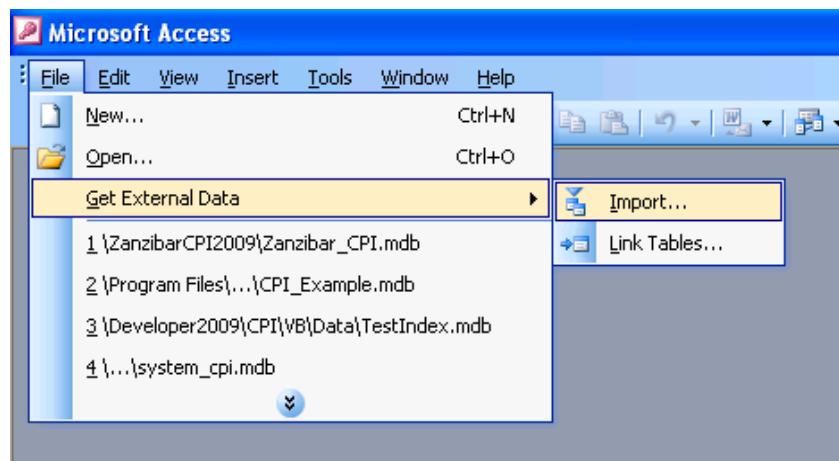
18. Remember, "IsActive" means that price information for this item variety is available. Save the spreadsheet as **CountryVariety**.

**Snapshot 12**

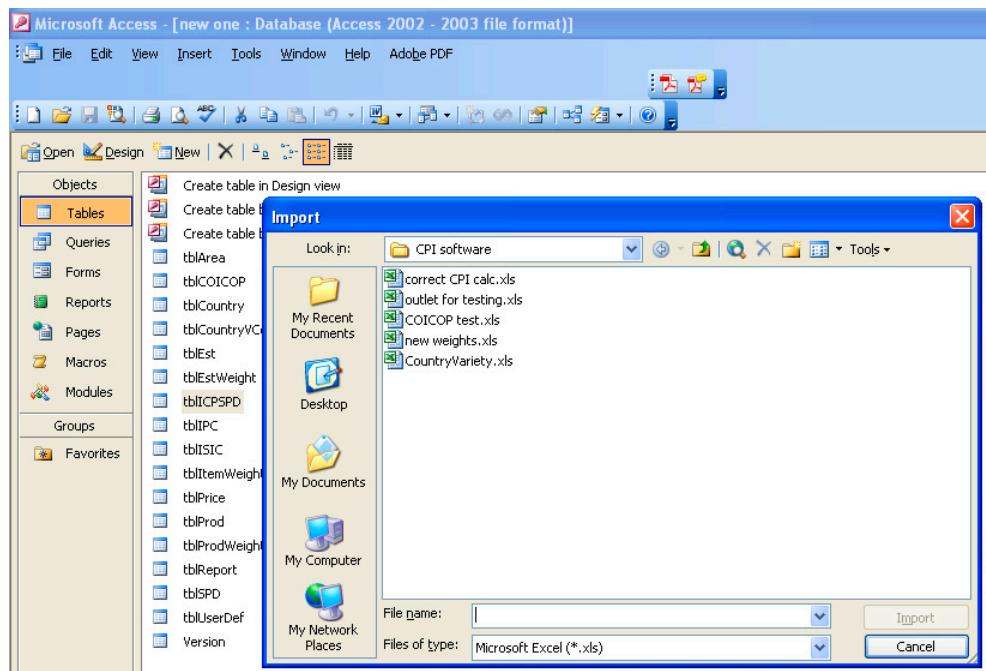
	A	B	C	D
1	vCode	vParent	vDesc	IsActive
2	11.01.11.1_01a	11.01.11.1_01	Imported Rice Basmat	TRUE
3	11.01.11.1_01b	11.01.11.1_01	Local Rice Pishori	TRUE
4	11.01.11.1_01c	11.01.11.1_01	Local Rice Kitumbo	TRUE
5	11.01.11.2_01a	11.01.11.2_01	Maize Flour	TRUE
6	11.01.11.2_01b	11.01.11.2_01	Wheat Flour	TRUE
7	11.01.11.2_01c	11.01.11.2_01	Sorghum Flour	TRUE
8	11.01.11.2_06a	11.01.11.2_06	Sorghum grain ( Mtama)	TRUE
9	11.01.11.4_02a	11.01.11.4_02	Biscuit Glucose	TRUE
10	11.01.11.4_16a	11.01.11.4_16	Bread (mkate wa boflo)	TRUE
11	11.01.11.5_01a	11.01.11.5_01	Spaghetti (Tambi)	TRUE
12	11.01.12.1_09a	11.01.12.1_09	Meat with Bones (Nyama na mfupa)	TRUE
13	11.01.12.1_09b	11.01.12.1_09	Meat without Bones (Nyama safi)	TRUE

19. Next, use Microsoft Access to import “**CountryVariety**” from the created Excel spreadsheet. Open the **CPI Access Database**, which was the database created in Snapshot 1 (Default Database File Location, and Default CPI Database, i.e., CPI.mdb). On file menu, click **Get External Data**, then **import**.

**Snapshot 13**



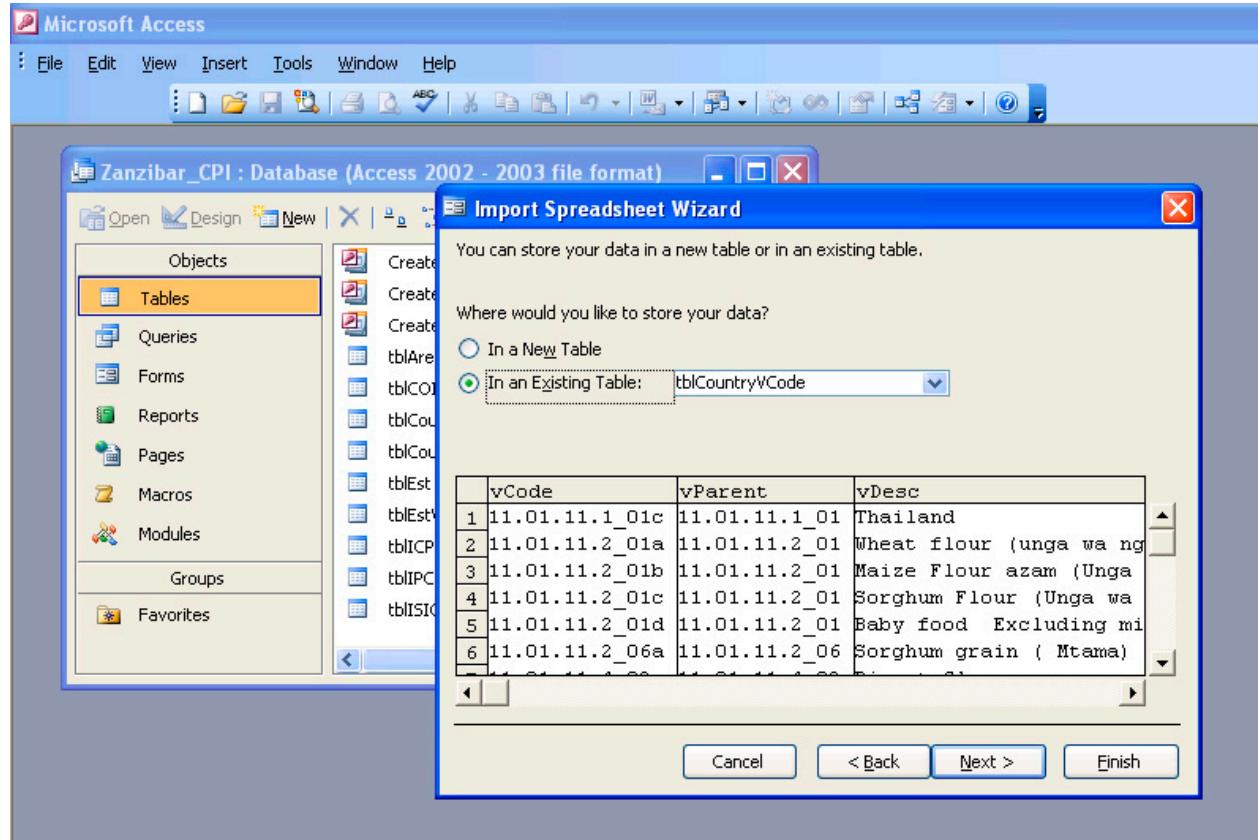
**Snapshot 14**



20. From the **import** dialog box, in the **files of type**, select Microsoft Excel (\*.xls). Select **CountryVariety.xls** that should have been created and saved (Snapshot 14), then click **import**.

21. Append the worksheet in the existing "tblCountryVCode."

**Snapshot 15**



22. When finished, close Microsoft Access.

### 1.6 Adding product and variety to each outlet

23. The next step is to define in each outlet, the product/s and varieties. Note, there is no easy way to import the varieties for each outlet, since the system is building relationships and integrity. That is, a Serial Number (SN) is being assigned to each product and variety.

Edit

Click **Edit** on the Main PIPS window, select the outlet of interest, right click on the outlet, and then click **Edit Product**.

**Snapshot 16**

Consumer Price Index Compilation Model - [Search for Outlet]

File Edit Data Utilities Report Options Window Help

Search for Outlet

Search by Outlet ID  
 Search by Key Words  
 Search by Area (W)  
 Search Alphabetically

Area (Weight)   
Area (Compilable)   
District   
Data Collector

Go

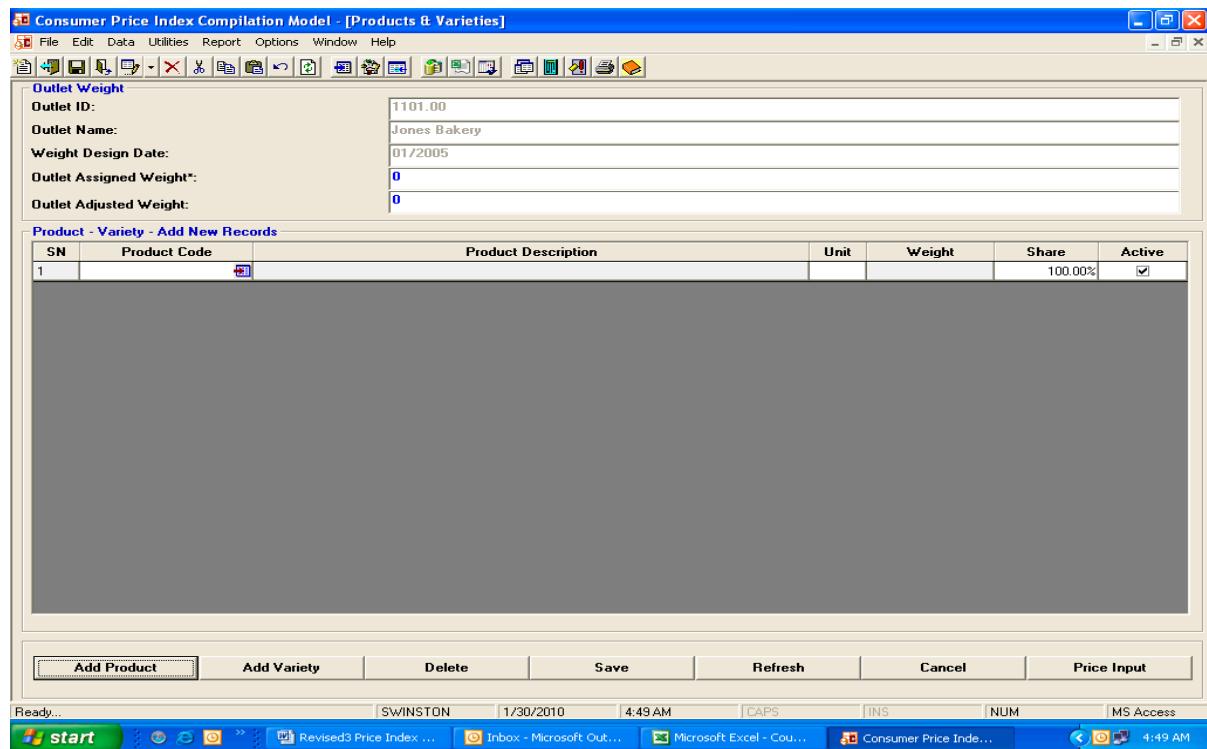
A-B C-D E-F G-H I-J K-L M-N O-P Q-R S-T U-V W-X Y-Z

List All Outlet  Search by Last Column

Outlet Information - total 267 records. (right click for editing)

Outlet ID	Outlet Name	Notes	Market	Area (Weights)
5311001	Hamadi Ali		Urban	Urban
5311002	Mzee Khamis		Urban	Urban
5311003	Ali		Urban	Urban
5311004	Juma Machano 1		Urban	Urban
5311005	Vuai		Urban	Urban
5311006	Abdalla Ussi 1		Urban	Urban
5311007	Vuai		Urban	Urban
5311008	Nikate		Urban	Urban
5311009	Ali Vuai		Urban	Urban
5311010	Ali M/kwerekwe Hardware		Urban	Urban
5311011	atuma Mwanakwerekwe		Urban	Urban
5311012	Haji Ali		Urban	Urban
5311013	Mzee Hamadi (madafu)		Urban	Urban
5311014	Ahmed Saidi		Urban	Urban
5311015			Urban	Urban

### **Snapshot 17**



24. Click **Add Product**, and then click the icon to select the product. At this step, the **COICOP Product Code Table** will open. Next, select the product for which there is at least a variety item for collecting a price.

**Snapshot 18**

Consumer Price Index Compilation Model - [[Select a Product Code]]

File Edit Data Utilities Report Options Window Help

Search for a product from OECD Classification

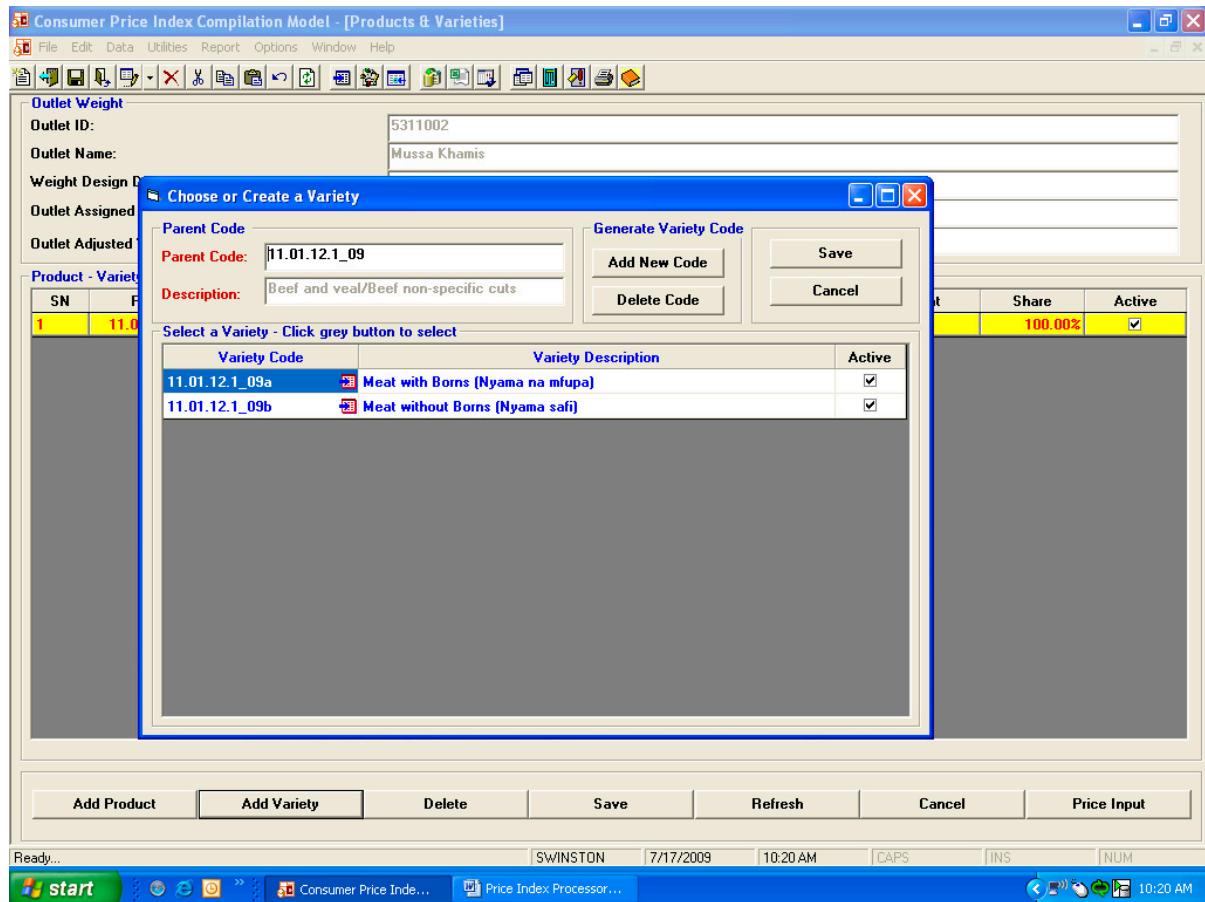
Key words:  Search List All Cancel

COICOP-ICP Product Classification, generating 1258 Records.

COICOP-ICP	COICOP	Level	Description
1		1	GROSS DOMESTIC PRODUCT
11		2	INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS
11.01		3	FOOD AND NON-ALCOHOLIC BEVERAGES
11.01.1		4	FOOD
11.01.11	01.1.1.	5	Bread and cereals
+ 11.01.11.1	01.1.1.1	6	Rice
- 11.01.11.2	01.1.1.5	6	Other cereals, flour and other products
01		7	FLOUR
02		7	PREPARED FLOUR MIXES
03		7	BREAKFAST CEREAL
04		7	CORNMEAL
05		7	WHEAT
06		7	OTHER CEREAL SOLD AS GRAIN
07		7	Cous Cous
08		7	Other rice products
09		7	Milling service
+ 11.01.11.3	01.1.1.2	6	Bread
+ 11.01.11.4	01.1.1.4	6	Other bakery products

25. Snapshot 19 shows how to select the varieties. Remember that the varieties were appended to the products (Snapshot 15). Therefore, the varieties are associated with the products.

### **Snapshot 19**



26. Once the products and varieties have been entered, click **Cancel** to select another outlet. Click **Cancel** to return to PIPS main menu.

## 1.7. Entering Price Information

27. At this point, all the outlets with their products and varieties should have been entered. Recall also those weights for each product were also entered (Snapshot 7, paragraph 10. More importantly, the price information (base price, previous price, and current price) for the varieties should also be entered.
28. Before entering price information into the PIPS, make sure the Excel spreadsheet with price information is organized according to at least, Outlet ID, Outlet Name, Variety Code, Description, base price, previous price, and current price (Snapshot 20). Columns, B, E and G are very important.

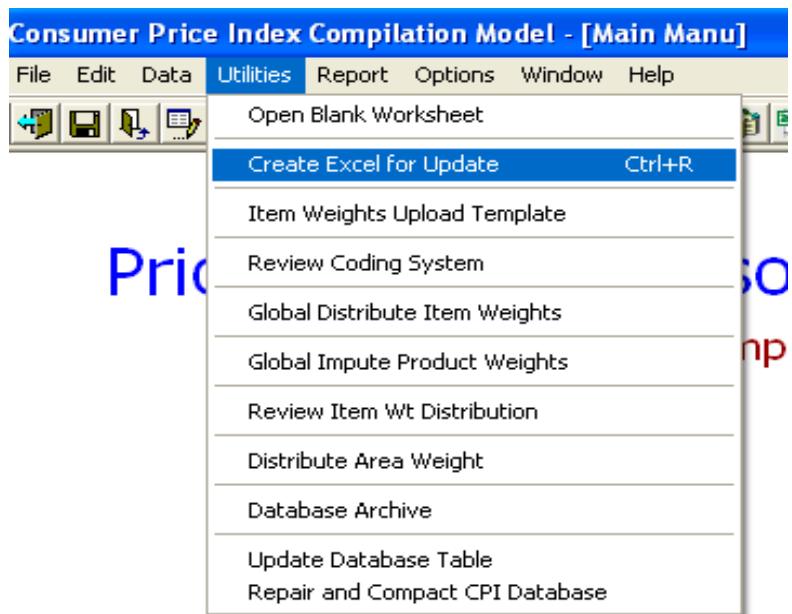
**Snapshot 20**

The screenshot shows a Microsoft Excel window with the title bar 'Microsoft Excel - Example'. The menu bar includes File, Edit, View, Insert, Format, Tools, Data, Window, Zanzibar CPI Calculation, Help, and Adobe PDF. The ribbon has tabs for Home, Insert, Page Layout, Formulas, Data, Page Break Preview, and Sort & Filter. The status bar shows 'Type a question' and various icons. The active cell is C8, and the formula bar shows '= Amour Ali Vuai'. The spreadsheet contains data for outlets and their products:

Row	Outlet ID	Outlet Name	IsProd	Code	Description	Dec 2005					A
						Base	January-06	February-06	March-06	April-06	
1	5311010	Amour Ali Vuai	FALSE	11.01.11.1_01a	Imported Rice Basmati	910	1000	1000	1000	1000	
2	5411001	Bargisi Saleh	FALSE	11.01.11.1_01b	Local Rice Pishori	1001	1100	1000	1000	1000	
3	5512001	Dariai	FALSE	11.01.11.1_01c	Local Rice Kitumbo	910	1000	1000	1000	1000	
4	5326021	Hamduni Store	FALSE	11.01.11.1_01a	Imported Rice Basmati	910	1000	1000	1000	1000	
5	5511001	Mcha Khamis	FALSE	11.01.11.1_01b	Local Rice Pishori	950	1000	1000	1000	1000	
6	5321025	Zakaria Store	FALSE	11.01.11.1_01c	Local Rice Kitumbo	910	1000	1000	1000	1000	
7	5311010	Amour Ali Vuai	FALSE	11.01.11.2_01a	Maize Flour	910	1000	1000	1000	1000	
8	5411001	Bargisi Saleh	FALSE	11.01.11.2_01b	Wheat Flour	910	1000	1000	1000	1000	
9	5512001	Dariai	FALSE	11.01.11.2_01c	Sorghum Flour	910	1000	1000	1000	1000	
10	5511001	Mcha Khamis	FALSE	11.01.11.2_01a	Maize Flour	910	1000	1000	1000	1000	
11	5321025	Zakaria Store	FALSE	11.01.11.2_01b	Wheat Flour	910	1000	1000	1000	1000	
12	5311010	Amour Ali Vuai	FALSE	11.01.11.2_01c	Sorghum Flour	728	800	800	800	800	
13	5411001	Bargisi Saleh	FALSE	11.01.11.2_01b	Sorghum grain ( Mtama)	728	800	800	800	800	
14	5512001	Dariai	FALSE	11.01.11.2_01b	Maize Flour azam (Ungu)	728	800	800	800	800	
15	5326021	Hamduni Store	FALSE	11.01.11.2_01b	Maize Flour azam (Ungu)	637	700	700	800	800	
16	5511001	Mcha Khamis	FALSE	11.01.11.2_01b	Maize Flour azam (Ungu)	728	800	800	800	800	
17											

29. Next, to enter the price information into the system, go to **Utilities** in the PIPS and select **Create Excel for Update**.

**Snapshot 21**



30. Click **Select All** to upload all the outlets, then click **Create Excel Sheet**. Click on the icon to open the Excel spreadsheet. In the Excel menu, go to **tools**, then **protection**, then **Unprotect Sheet**. To unprotect the sheet, use **password 123**. For Microsoft Excel 2007, click on 'Review' to unprotect the sheet.

**Snapshot 22**

The screenshot shows a Microsoft Excel window titled 'Microsoft Excel - ~X000DBC.xls'. The 'Tools' menu is open, and the 'Protection' submenu is highlighted. The submenu contains the following options:

- Unprotect Sheet...
- Allow Users to Edit Ranges...
- Protect Workbook...
- Protect and Share Workbook...

The main Excel interface shows a table with columns: Outlet SN, Outlet ID, Outlet Name, IsProd, Code, and Description. The first row has a red background. The second row has a yellow background. The text 'Save Back to CPI Database' is visible in the cell A1.

Outlet SN	Outlet ID	Outlet Name	IsProd	Code	Description
3	1	Jones Bakery	TRUE	11.01.11.3_01	Bread/WHITE BREAD
4	1	Jones Bakery	FALSE	11.01.11.3_01a	slice bread
5	1	Jones Bakery	FALSE	11.01.11.3_01b	whole
6	1	Jones Bakery	TRUE	11.01.11.4_04	Other bakery products/CAKES AND CUPCAKES (EXCLU

31. Once the spreadsheet is unprotected, go to Data from the Excel toolbar, and filter the data. Filter column D (**IsProd**) **False**. All the varieties with their prices for each outlet should be listed. Copy from the Excel spreadsheet already created (Snapshot 22) into the PIPS Excel spreadsheet, only the base, previous and current period prices. Make certain the correct information is copied for each outlet and variety.
32. After entering the price information, click **Save Back to CPI Database**, then exit. For Microsoft Excel 2007, go to the "View" menu, click on the Macro drop down menu, then run the macro to upload the data.
33. At this point, all the information necessary to compile the CPI should have been entered: areas, products and their weights, outlets, varieties, and prices.

### **III. ITEM WEIGHT DETERMINATION AND DISTRIBUTION**

#### **1.8. Reviewing Item Weight Distribution**

34. At this time, products per outlets have been assigned and the system needs to distribute the item weights. Hence, Click **Utilities** in the PIPS menu, then **Global Distribute Item Weights**.
35. To understand how the PIPS distributes the item weight, consider:

##### **Snapshot 23 (Products)**

Consumer Price Index Compilation Model - [Edit Review Item Weights]						
<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b> <b>F</b>						
	COICOP-ICP	Level	Description	Urban	Total	
1	COICOP-ICP	7	RICE	18000	18000	
2	11.01.11.1_01	7	Beef and veal/GROUND/MINCED BEEF	8000	8000	
3	11.01.12.1_01	7				
4	11.01.18.1_01	7	Sugar/White sugar	10000	10000	
5						

a CPI basket that has three products (rice, beef and sugar) with total expenditure of 36,000 shillings, Snapshot 23. Note, rice accounts for 50 percent, beef, 22.2 percent, and sugar 27.8 percent. For these products, prices are collected from at least one of the three outlets (Shoppers 2001, 2002, 2003). There are three different varieties of rice: grades 1, 2, and 3, and only one variety of beef and sugar respectively. Therefore, Shoppers 2001 provides prices for grade 1 rice, beef, and sugar; Shoppers 2002 provides prices for grade 1 and 2 rice, and sugar; and Shoppers 2003 provides prices for grade 1, 2, and 3 rice only.

**Table 1:**

<i>Shoppers 2001</i>	<i>Shoppers 2002</i>	<i>Shoppers 2003</i>
<i>Grade 1 rice</i>	<i>Grade 2 rice</i>	<i>Grade 1 rice</i>
<i>Beef</i>	<i>Grade 3 rice</i>	<i>Grade 2 rice</i>
<i>Sugar</i>	<i>Sugar</i>	<i>Grade 3 rice</i>

**Snapshot 24 (Outlets)**

The screenshot shows a Windows application window titled "Consumer Price Index Compilation Model - [Search for Outlet]". The menu bar includes File, Edit, Data, Utilities, Report, Options, Window, and Help. The toolbar contains various icons for file operations like Open, Save, Print, and Database management. A search panel on the left titled "Search for Outlet" offers options to search by Outlet ID, Key Words, Area (W), or Alphabetically, with "Search by Outlet ID" selected. It also includes a "List All Outlet" button and a "Search by Last Column" input field. To the right, a "Show Last Column By" section allows selecting "Area (Weight)" (which is checked) or "Area (Compilable)", "District", or "Data Collector". Below these are letter-based filters for searching: A-B, C-D, E-F, G-H, I-J, K-L, M-N, O-P, Q-R, S-T, U-V, W-X, Y-Z. The main area displays a table titled "Outlet Information - total 3 records. (right click for editing)". The columns are "Outlet ID", "Outlet Name", "Notes", "Market", and "Area (Weights)". The data rows are:

Outlet ID	Outlet Name	Notes	Market	Area (Weights)
00001	Shoppers 2001		Urban	Urban
00002	Shoppers 2002		Urban	Urban
00003	Shoppers 2003		Urban	Urban

**Snapshot 25 (Shoppers 2001 Assigned Weight)**

The screenshot shows a Windows application window titled "Consumer Price Index Compilation Model - [Products & Varieties]". The menu bar includes File, Edit, Data, Utilities, Report, Options, Window, and Help. The toolbar contains various icons for file operations like Open, Save, Print, and Database management. On the left, a form titled "Outlet Weight" contains fields for "Outlet ID" (00001), "Outlet Name" (Shoppers 2001), "Weight Design Date" (01/2000), "Outlet Assigned Weight\*" (16000), and "Outlet Adjusted Weight" (16000). To the right, a table titled "Products - Variety (total: 6 records)" lists products with their descriptions, units, weights, shares, and active status. The data is as follows:

SN	Product Code	Product Description	Unit	Weight	Share	Active
1	11.01.11.1_01	Rice/RICE		3000.00	18.75%	<input checked="" type="checkbox"/>
V	11.01.11.1_01a	Rice Grade 1		3000.00	100.00%	<input checked="" type="checkbox"/>
2	11.01.12.1_01	Beef and veal/GROUND/MINCED BEEF		8000.00	50.00%	<input checked="" type="checkbox"/>
V	11.01.12.1_01a	Beef 1 Kg		8000.00	100.00%	<input checked="" type="checkbox"/>
3	11.01.18.1_01	Sugar/White sugar		5000.00	31.25%	<input checked="" type="checkbox"/>
V	11.01.18.1_01a	Sugar 1 Kg		5000.00	100.00%	<input checked="" type="checkbox"/>

36. To determine how the weights are assigned to Shoppers 2001 (Snapshot 25) suppose the three outlets, Shoppers 2001, 2002, and 2003 provide prices for three products (rice, beef, and sugar) and all three outlets provide a price of 3,000 shillings for grade 1 variety rice. Then, based on the allocation mentioned in paragraph 35, the PIPS assumes Shoppers 2002 and Shoppers 2003 provide prices for grades 2 and 3 rice varieties, and Shoppers 2003 provides prices for all three grades of rice. Furthermore, Shoppers 2001 is the only outlet that provides a price for beef; hence it was allocated 8,000 shillings for beef. Shoppers 2001 and 2002 both provides price for sugar; therefore each outlet was attributed a weight of 5,000 shilling. See Table 2.

**Table 2:**

Variety	Shoppers 2001	Shoppers 2002	Shoppers 2003	Variety Weight
Rice Grade 1	3,000.00	3,000.00	3,000.00	
Rice Grade 2		3,000.00	3,000.00	
Rice Grade 3			3,000.00	18,000.00
Beef	8,000.00			8,000.00
Sugar 1 Kg	5,000.00	5,000.00		10,000.00

37. As a result, the total OUTLET ASSIGNED WEIGHT for Shoppers 2001 is: **16,000 shillings**.

### **Snapshot 26 (Shoppers 2002 Assigned Weight)**

The screenshot shows the software interface for managing outlet weights. The top menu bar includes File, Edit, Data, Utilities, Report, Options, Window, and Help. Below the menu is a toolbar with various icons. The main window has a title bar "Consumer Price Index Compilation Model - [Products & Varieties]". A sub-header "Outlet Weight" is displayed. The "Outlet ID:" field contains "00002". The "Outlet Name:" field contains "Shoppers 2002". The "Weight Design Date:" field contains "01/2000". The "Outlet Assigned Weight\*:" field contains "11000". The "Outlet Adjusted Weight:" field also contains "11000". Below this, a section titled "Products - Variety (total: 5 records)" lists five items:

SN	Product Code	Product Description	Unit	Weight	Share	Active
1	11.01.11.1_01	Rice/RICE		6000.00	54.55%	<input checked="" type="checkbox"/>
V	11.01.11.1_01a	Rice Grade 1		3000.00	50.00%	<input checked="" type="checkbox"/>
V	11.01.11.1_01b	Rice Grade 2		3000.00	50.00%	<input checked="" type="checkbox"/>
2	11.01.18.1_01	Sugar/White sugar		5000.00	45.45%	<input checked="" type="checkbox"/>
V	11.01.18.1_01a	Sugar I Kg		5000.00	100.00%	<input checked="" type="checkbox"/>

38. The second outlet, Shoppers 2002, has a total weight of 11,000 shillings. Each variety of rice, grades 1 and 2 have been assigned 3,000 shillings each. Sugar was assigned shillings 5,000.

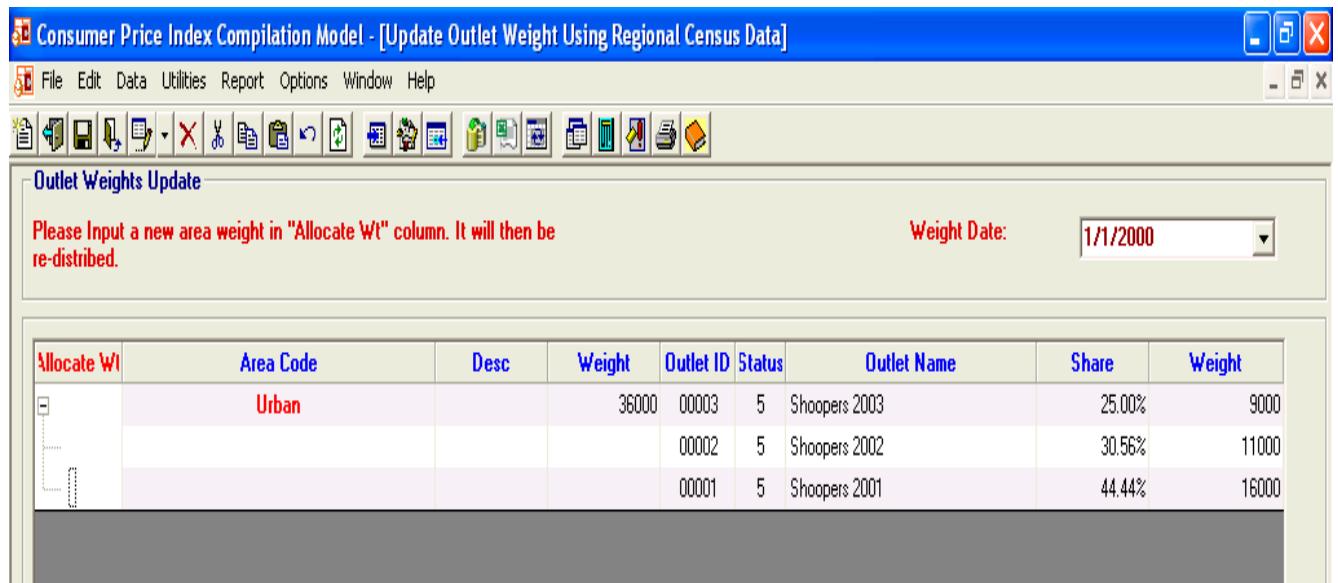
### **Snapshot 27 (Shoppers 2003 Assigned Weight)**

The screenshot shows the software interface for managing outlet weights. The top menu bar includes File, Edit, Data, Utilities, Report, Options, Window, and Help. Below the menu is a toolbar with various icons. The main window has a title bar "Consumer Price Index Compilation Model - [Products & Varieties]". A sub-header "Outlet Weight" is displayed. The "Outlet ID:" field contains "00003". The "Outlet Name:" field contains "Shoppers 2003". The "Weight Design Date:" field contains "01/2000". The "Outlet Assigned Weight\*:" field contains "9000". The "Outlet Adjusted Weight:" field also contains "9000". Below this, a section titled "Products - Variety (total: 4 records)" lists four items:

SN	Product Code	Product Description	Unit	Weight	Share	Active
1	11.01.11.1_01	Rice/RICE		9000.00	100.00%	<input checked="" type="checkbox"/>
V	11.01.11.1_01a	Rice Grade 1		3000.00	33.33%	<input checked="" type="checkbox"/>
V	11.01.11.1_01b	Rice Grade 2		3000.00	33.33%	<input checked="" type="checkbox"/>
V	11.01.11.1_01c	Rice Grade 3		3000.00	33.33%	<input checked="" type="checkbox"/>

39. The last outlet, Shoppers 2003, was assigned a weight of 9,000 shillings, since the outlet provided prices for all three varieties of rice.

**Snapshot 28**



40. Snapshot 28 shows the shares of each outlet after the total weight for the basket has been distributed. In summary (Table 3):

**Table 3:**

Variety	Shoppers 2001	Shoppers 2002	Shoppers 2003	Variety Weight
Rice Grade 1	3,000.00	3,000.00	3,000.00	
Rice Grade 2		3,000.00	3,000.00	
Rice Grade 3			3,000.00	18,000.00
Beef	8,000.00			8,000.00
Sugar 1 Kg	5,000.00	5,000.00		10,000.00
<b>Outlet Assigned Weight</b>	<b>16,000.00</b>	<b>11,000.00</b>	<b>9,000.00</b>	<b>36,000.00</b>

## 1.9. Checking for Data Consistency

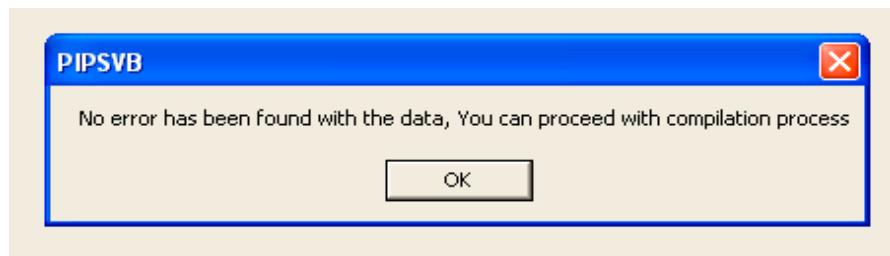
41. It is important to check the data for errors each time a change is made; therefore click **Data Check** on the PIPS main menu.

**Snapshot 29**

The screenshot shows a software interface titled "Consumer Price Index Compilation Model - [Data Diagnosis and Data Check]". The menu bar includes File, Edit, Data, Utilities, Report, Options, Window, and Help. Below the menu is a toolbar with various icons. A message at the top says "Check Data Error: Found Total 7 Errors." The main area is a data grid titled "Data Diagnosis and Error Check Report" with columns: Outlet ID, Outlet Name, Product Code, Error Type, and Remedy. The data shows 7 rows of errors, all related to product/variety weight being not checked. The "Remedy" column suggests checking item weights tables and invoking re-calculation.

Outlet ID	Outlet Name	Product Code	Error Type	Remedy
1101	Jones Bakery	11.01.11.4_04a	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation
1101	Jones Bakery	11.01.11.4_04b	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation
1102.00	Mary Market	11.01.11.4_04a	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation
1102.00	Mary Market	11.01.11.4_04b	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation
1102.00	Mary Market	11.01.11.4_05a	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation
1102.00	Mary Market	11.01.11.4_05b	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation
1102.00	Mary Market	11.01.11.4_06b	Warning: product/variety weight is not checked	Check Item Weights Table, Invoke Re-calculation

42. If there are errors, messages such as those displayed in Snapshot 29 will appear. Hence, the errors have to be solved before compiling the index. If there are no errors, then the box stating "no error has been found" will appear.



43. When finished checking the data checks, click **Compile** for the PIPS main menu to compile the index. Select **Current Period (t)**, **Compilation Method**, and **Imputation Formula**, and then **Preview** to see the preview before compiling the index.

### Snapshot 30

Consumer Price Index Compilation Model - [Collect Compilation Information]

File Edit Data Utilities Report Options Window Help

IMPUTATION PERIOD

Weight Ref Date:	12/2005
Base Period (t0)	12/2005
Current Period (t)	07/2009
Previous Period (t-1)	06/2009

COMPILE METHOD

<input checked="" type="radio"/> By Product
<input type="radio"/> By Region
<input type="radio"/> By Outlet
<input checked="" type="checkbox"/> Include Imputed Index and Price

IMPUTATION FORMULA

<input type="radio"/> Jevons:Laspeyres
<input checked="" type="radio"/> Jevons:Geo-Laspeyres

PREVIEW

<input type="checkbox"/> Two-Stage Index
--

Buttons: Preview, Compile, Download, Detect Outliers, Cancel

Rebuilding the array, please wait...

Outlet ID	Level	Code	Description	Wt0	Base Price	Prev Price	Curr Price
	0	0	All Products		12/2005	06/2009	07/2009
	1	1	GROSS DOMESTIC PRODUCT				
	2	11	INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLD				
	3	11.01	FOOD AND NON-ALCOHOLIC BEVERAGES				
	4	11.01.1	FOOD				
	5	11.01.11	Bread and cereals				
	6	11.01.11.1	Rice				
5311010	7	11.01.11.1_01	Rice/RICE	467603818.33			
5311010	8	11.01.11.1_01c	Thailand	467603818.33	500.00	1000.00	800.00
5321025	7	11.01.11.1_01	Rice/RICE	467603818.33			
5321025	8	11.01.11.1_01c	Thailand	467603818.33	700.00	900.00	900.00
5326021	7	11.01.11.1_01	Rice/RICE	467603818.33			
5326021	8	11.01.11.1_01c	Thailand	467603818.33	480.00	800.00	800.00
5411001	7	11.01.11.1_01	Rice/RICE	467603818.33			
5411001	8	11.01.11.1_01c	Thailand	467603818.33	500.00	1000.00	900.00
5511001	7	11.01.11.1_01	Rice/RICE	467603818.33			
5511001	8	11.01.11.1_01c	Thailand	467603818.33	500.00	1000.00	900.00

44. Snapshot 31 shows the imputation results. These results can be exported to Excel.

### Snapshot 31

The screenshot shows the 'Consumer Price Index Compilation Model - [CPI Index Report]' application. The interface includes a menu bar (File, Edit, Data, Utilities, Report, Options, Window, Help) and a toolbar with various icons. On the left, there are three boxes containing parameters: 'STPRs Period: 06/2009 -- 07/2009', 'LTPRs Period: 12/2005 -- 07/2009', and 'Formula/Method: Jevons:Geo-Laspeyres -- By Product'. In the center, there are fields for 'User ID: Developer' and 'Computer Name: MEZIFA', along with a dropdown menu for 'Show Report at:'. On the right, there is a vertical stack of buttons for 'Print', 'Export to Excel', 'Save to HTML', 'Save to DB', and 'Cancel'. Below these controls, a message 'Total 15 records.' is displayed above a large table. The table has columns for Region, Level, Code, Description, STPR, Updated W, and CPI. The data rows show the following information:

Region	Level	Code	Description	STPR	Updated W	CPI
	0	0	All Products	100.77	157.28	157.28
1	1		GROSS DOMESTIC PRODUCT	100.77	157.28	157.28
2	11		INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS	100.77	157.28	157.28
3	11.01		FOOD AND NON-ALCOHOLIC BEVERAGES	100.89	96.98	167.54
3	11.02		ALCOHOL BEVERAGES, TOBACCO AND NARCOTICS	108.50	0.84	161.67
3	11.03		CLOTHING AND FOOTWARE	100.57	7.91	126.24
3	11.04		HOUSING, WATER, ELECTRICITY, GAS, AND OTHER FUELS	100.38	24.52	155.43
3	11.05		FURNISHING, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD M.	100.22	7.56	142.60
3	11.06		HEALTH	100.00	3.13	151.37
3	11.07		TRANSPORT	102.92	4.20	150.59
3	11.08		COMMUNICATION	100.00	2.25	93.88
3	11.09		RECREATION AND CULTURE	100.07	0.53	136.91
3	11.10		EDUCATION	100.00	1.45	130.73
3	11.11		RESTAURANTS AND HOTELS	100.00	5.71	184.54
3	11.12		MISCELLANEOUS GOODS AND SERVICES	100.91	3.23	134.09

45. In conclusion, Snapshot 31 provides the CPI results. The results are provided for the All-Item CPI and for each COICOP group. For example, the overall CPI in Snapshot 31 is 157.28, while the CPI for the health group is 151.37.

*Caution to Users of this Guide: The procedures provided in this Guide works best with Excel 2003 Version. The PIPS system is currently being tested using the Excel 2007. In the meantime, Users are urged to use other creative means of using Excel 2007 and the PIPS system.*